

Work Order ID 134695

Wednesday, July 15, 2015 12:00:19 PM

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Item ID: D3391-025

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Aft Tube Assembly

Stop ***NS2***

Start Date: 7/15/2015 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/15/2015 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MUS Date: JUL 15 2015

Tooling:

Date:

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	I								

100

0.00

100

MORI SEIKI CNC LATHE LARGE

Mori Seiki

Memo

0.02

Mori Seiki CNC Lathe Large

Turn as per Folio FA599

Rev: M & Dwg D3391 Rev: I

ensure steady rest is turning true

****REMOVE STEADY REST AND MACHINIG MARKS****

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

Memo

0.00

Quality Control

mmml
15/07/23mmml
15/07/24

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Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
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Item Name: Aft Tube Assembly
Start Date: 7/15/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/15/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	QC8- Inspect parts - second check	0.00				1	0		DAS 14 9-89 15/08/31
140									
QC	Memo	0.00							
Quality Control	***INSPECT INSIDE BORE***								
150	Skidtubes	0.00							
150									
Skidtubes	Memo	0.00							
Skidtubes	1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803								
160	BENDING MACHINE - SKIDTUBES	0.00							
160									
CNC Bend 1	Memo	0.00							
CNC Delta 100 Bender	Form as per Dwg D3391 Using Bend Prog 3391025								

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Start Date: 7/15/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/15/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170	QC5- Inspect part completeness to step on W/O	0.00							
170									
QC	Memo	0.00							
Quality Control									

**DAS
18
9-89**1 2 15-09-06

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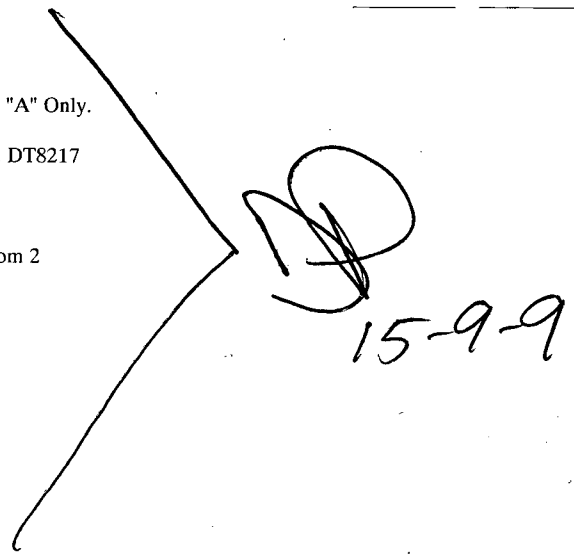
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Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Tube Assembly
Start Date: 7/15/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/15/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Skidtubes	0.00							
180									
Skidtubes	Memo	0.02							
Skidtubes	1-Open Aft cap pilot hole to .208" as per Dwg D3391								
	2-Drill float bag holes using DT8809 as per Dwg D3391(Holes marked "A" Only.								
	3-Drill wearplate holes as per Dwg D3391 using DT8878(Mid Tube) & DT8217 Wearplate Jig . *****Do Not Open To Finished Size*****								
	4-Drill Wearshoe holes as per DWG D3391 using DT8939 locating from 2 previously drilled aft wearplate holes.								
	5-Open wearplate holes to 0.297" and c'bore as per dwg D3391								
	6-Open up all float bag holes to 0.328" and c'sink as per Dwg D3391.								
	7-Deburr								
	8- Scribe batch # on fwd end								



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 Start Date: 7/15/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/15/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	Skidtubes	0.00							
220									
Skidtubes									
Skidtubes	Memo 1- Instal spacers as per dwg D3391 A/R Magnabond 6398 Batch: <u>131589</u> exp. date: <u>16-7-30</u> cure time 12hrs as per QSI0015 2- Grind crossbolts flush 3- Back drill using #9 drill 4- Touchup Magnabond 5- Deburr	0.01							
230	QC5- Inspect part completeness to step on W/O	0.00							
230									
QC	Memo	0.00							
Quality Control									

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SEP 14 2015

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Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Aft Tube Assembly
 Start Date: 7/15/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/15/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
235	Pressure Wash per QSI005 4.3	0.00							
235									
HandFinish	Memo	0.01							
Hand Finishing	AND REALODINE AS PER PAR09-043								
240	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
240	<i>M 131545</i>								
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <i>2:25</i> OVEN TEMPERATURE: <i>320°</i> FINISH TIME: <i>2:55</i>								
250	QC3- Inspect Part Finish	0.00							
250									
QC	Memo	0.00							
Quality Control									

1 0 15-9-14

1 0 15-9-28 **DAS 34 9-89**

1 x d 15 10 130 **DAS 15 9-89**

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Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Aft Tube Assembly
 Start Date: 7/15/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 7/15/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	HandFinishing	0.00							
260									
Hand Finish	Memo	0.01							
Hand Finishing	* 1-Install inserts as per Dwg D3391 2-Install Aft Cap as per Dwg D3391 A/ R Sikaflex-241/-291 <u>11/13/13</u> Sikaflex expiry date: <u>11/13/13</u> 3- INSTALL WEARPLATES AS PER DWG								
270	QC5- Inspect part completeness to step on W/O	0.00							
270									
QC	Memo	0.00							
Quality Control									
280	Identify as per dwg & Stock Location: <u>w/g</u>	0.00							
280									
Packaging	Memo	0.01							
Packaging									

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OCT 16 2015

0412-742-043 / 13137064 10 11 11/16/07

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Item ID: D3391-025 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Tube Assembly
Start Date: 7/15/2015 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 7/15/2015 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
290	QC21 - Final Inspection - Work Order Release	0.00							
290 QC	Memo	0.00							
Quality Control									

_____ M L S _____ OCT 19 2015 _____

2H 20151019

Picklist Print

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Work Order ID: 134695

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 7/15/2015

Required Date: 7/15/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev B 06-02-07 ECN773 dwg rev. D EC
 IPP Rev:C 06-03-28 Update Manuf. Instructions JLM
 IPP rev D 07.03.20 revF dwg EC
 IPP rev E 07.11.07 rev G dwg ecn 1053p EC verified by: DD
 IPP Rev:F 07-11-13 ECN 1056 DD verified by: EC
 IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC IPP Rev:H
 11.11.14 AS PER REV.I DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4095-047		Manufactured	No			260	Each	11.0000	1	1			
D4095-047													
Wearpad Aft													

Location	Loc Qty	Loc Code
FP001	11	
116100	7	
133502	4	

D4095-049		Manufactured	No			260	Each	33.0000	1	1			
D4095-049													
Wearpad Aft													

Location	Loc Qty	Loc Code
FP001	33	
126331	33	

D6014-090		Manufactured	No			100	Each	27.0000	1	1			
D6014-090													
ALUMINUM EXTRUSION													

Location	Loc Qty	Loc Code
LG003	27	
79742	1	
86063	26	

15/09/30

15/09/30

15/07/23

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Work Order ID: 134695

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 7/15/2015

Required Date: 7/15/2015

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured No

230

Each

16.0000

4

4

D3670-4-200

Bushing

**

DP 15-9-10

Location

Loc Qty

Loc Code

FG

134924

10

87709

10

LG002

6

132777

6

D2646

Manufactured No

270

Each

62.0000

1

1

D2646

Aft Cap

**

11 18/09/30

Location

Loc Qty

Loc Code

FG

4

85848

2

90495

2

FP001

58

103306

1

114495

1

127924

6

128761

2

132325

16

132326

32

XL

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Work Order ID: 134695

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 7/15/2015

Required Date: 7/15/2015

Start Qty: 1.00

Required Qty: 1.00

D3672-1 Manufactured No

270 Each 578.0000 2 2

D3672-1

Washer, Phenolic

HL 15/09/30

Location	Loc Qty	Loc Code
FG	10	
85222	10	
FP001	138	
113581	138	
ST055	430	
112218	72	
120116	3	
127322	355	

X2

ALS4-1032-130 AE4S4-1032-130 Purchased No

260 Each 1,213.000 14 14

AI S4-1032-130

Rivnut

HL 15/09/30

Location	Loc Qty	Loc Code
st549	1213	
M132317	1213	

M133077

X14

ALS4-1032-225 AE4S8-1032-225 Purchased No

270 Each 1,095.000 8 8

AI S4-1032-225

Rivnut

HL 15/09/30

Location	Loc Qty	Loc Code
FG	120	
M127028	120	
FP001	484	
M131582	484	
st549	491	
M131582	491	

X9

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Work Order ID: 134695

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 7/15/2015

Required Date: 7/15/2015

Start Qty: 1.00

Required Qty: 1.00

AN3C4A

Purchased

No

270

Each

1,427.000

6

6

AN3C4A

Bolt

all 15/09/30

Location

Loc Qty

Loc Code

FG

20

M132234

26

122814

20

FP001

907

M132551

907

ST350

500

M132317

500

AN3C5A

Purchased

No

270

Each

501.0000

4

4

AN3C5A

Bolt

all 15/09/30

Location

Loc Qty

Loc Code

FG

5

M132930

24

122800

5

ST

56

121708

56

ST338a

440

M131803

40

M132640

400

Picklist Print

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Work Order ID: 134695

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Parent Item: D3391-025

D3391-025

Parent Item Name: Aft Tube Assembly

Start Date: 7/15/2015

Required Date: 7/15/2015

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0332R

Purchased

No

270

Each

4,223.000

10

10

NAS1149C0332R

ell 13109630

WASHER

Location

Loc Qty

Loc Code

FP001

2140

m130325

2140

GA

257

m131618

257

ST271

1826

m129390

72

m132262

1754

y10

DART AEROSPACE LTD		Work Order: 134695
Description: Float Skidtube (412)		Part Number: D3391-3
Inspection Dwg: D3391	Rev: I	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.00	✓		tape	LG-11
3.500	+/-0.010	3.502	✓		vern	CNR-08
Ø3.200	+/-0.010	3.201	✓			
Ø3.750	+/-0.010	3.750	✓			
30° x 0.060 chamfer	+/-0.010	30° x 0.060	✓		↓	
88.93	+/-0.030	88.93	✓		tape	LG-11

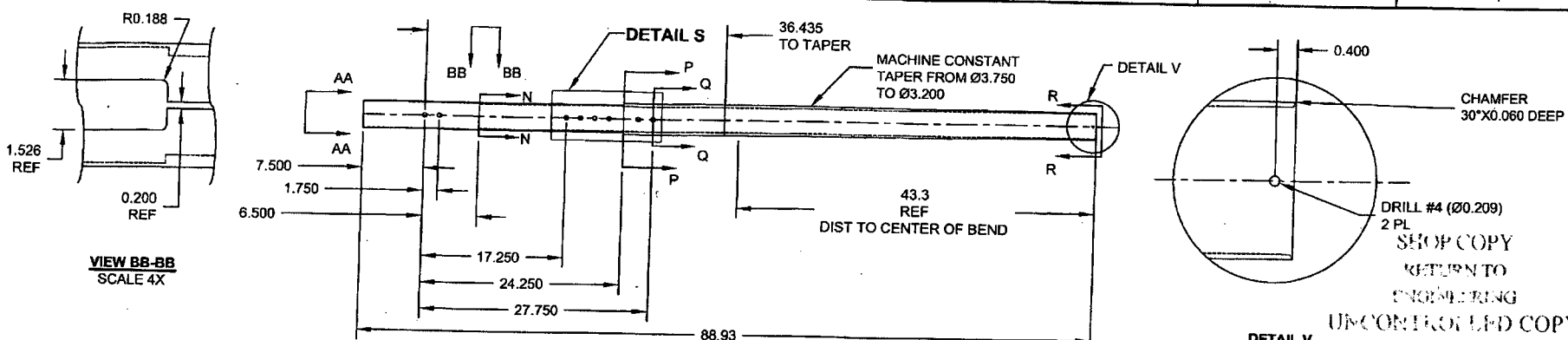
Measured by: MZL	Date: 15/07/23
Audited by: DAS	Date: 15/08/31

9-89 HAAS Section						
1.526	+0.000/-0.030	1.515	✓		SLO8	vern
7.500	+/-0.010	7.500	✓		SLO1	tape
27.750	+/-0.010	27.750	✓		↓	
31.750	+/-0.010	31.750	✓			
35.250	+/-0.010	35.250	✓			
3.300	+/-0.010	3.300	✓		SLO8	
0.200	+/-0.010	.201	✓			
3.520	+/-0.010	3.525	✓		↓	
0.687	+0.010/-0.000	.687	✓			
R0.062	+/-0.010	.062	✓		↓	
Ø0.484	+0.005/-0.001	.485	✓			

Measured by: 20	Date: 15-08-26
Audited by: DAS	Date: 15/08/31

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
H	11.06.21	Dimension 44.995 removed	KJ	
I	12.05.15	Dwg Rev updated	KJ	
J	12.05.23	Dimension updated	KJ	
K	12.10.15	88.93 dimension removed	KJ	
L	12.11.28	88.93 dimension added	KJ	

8 7 6 5 4 3 2 1

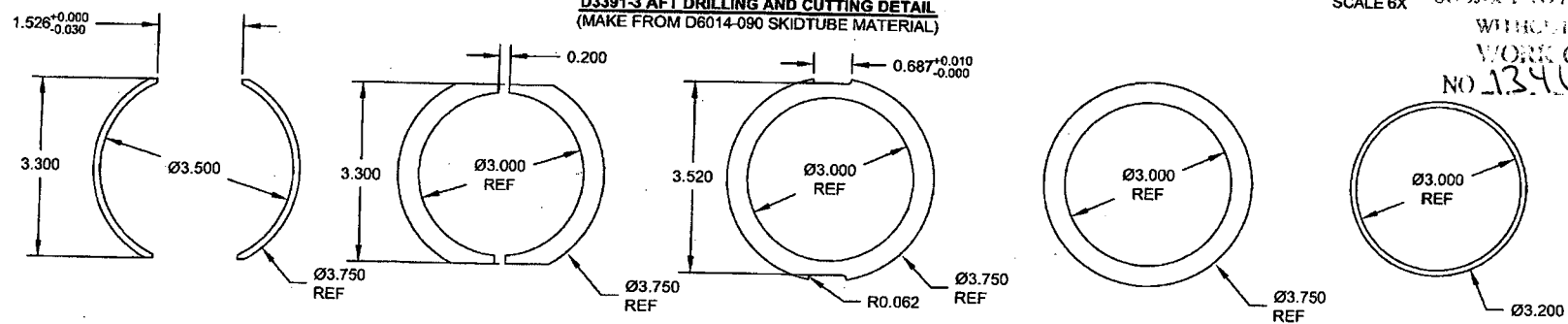


VIEW BB-BB
SCALE 4X

D3391-3 AFT DRILLING AND CUTTING DETAIL
(MAKE FROM D6014-090 SKIDTUBE MATERIAL)

DETAIL V
SCALE 6X

UNCONTROLLED COPY
 SUBJECT TO AGREEMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 134695 MLW
 1507-15



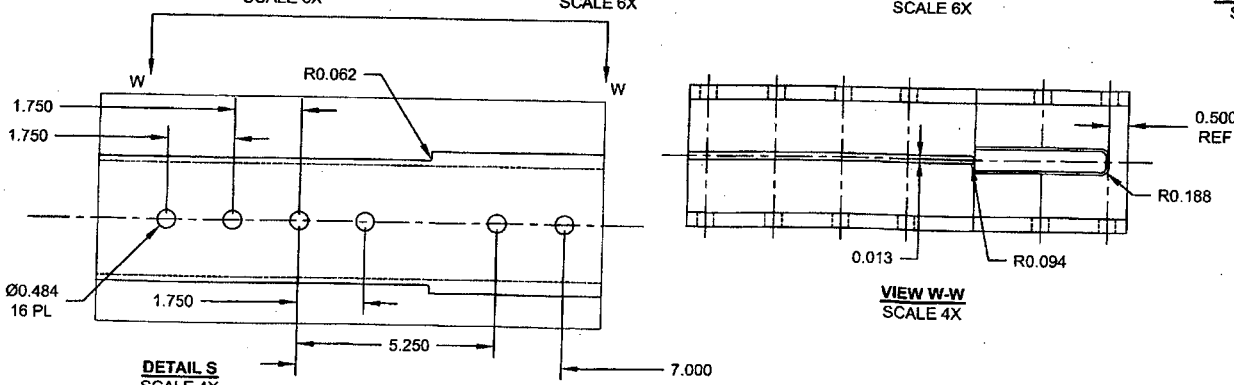
SECTION AA-AA
SCALE 6X

SECTION N-N
SCALE 6X

SECTION P-P
SCALE 6X

SECTION Q-Q
SCALE 6X

SECTION R-R
SCALE 6X



DETAILS S
SCALE 4X

VIEW W-W
SCALE 4X

RELEASED
 2011-11-04

DESIGN	RH	DART AEROSPACE USA, INC	
DRAWN	XDF	KENT, WA	
CHECKED		DRAWING NO.	REV. 1
MFG. APPR.		D3391	SHEET 7 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	11.10.13	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1

